

## WHAT IS CLAIMED IS:

1. A stator comprising a stator core having an even number of slots per pole per phase; and armature windings  
5 contained in said slots, said armature windings being wound in a single layer distributed winding, wherein

one of said slot arranged between two of said slots containing a first armature winding contains a second armature winding for a phase different from a phase of said  
10 first armature winding, and one of said slot arranged between said two of slots containing said first armature winding contains a third armature winding for a phase equal to the phase of said second armature winding, and one of  
said second armature winding and said third armature  
15 winding is arranged in a coil end portion in an outer peripheral side of said first armature winding, and the other is arranged in an inner peripheral side of said first armature winding.

20 2. A stator according to claim 1, which is constructed by partially performing winding work of said armature windings to a plurality of divided cores formed by laminating segments stamped in a sector; and then assembling said plurality of divided cores into a  
25 cylindrical shape and containing said armature windings spreading over said divided cores into the individual slots.

3. A stator according to any one of claims 1 and 2,  
wherein a dimension of said stator in an axial direction  
including said stator core and said coil end portions is  
reduced by arranging said coil end portions in a space near  
5 a side face of a back yoke portion.

4. A rotary electric machine comprising the stator  
according to any one of claims 1 to 3; and a rotor which is  
held so as to be arranged opposite to said stator.

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5. A linear motor comprising the stator according to any  
one of claims 1 to 3; and a mover which is held so as to be  
arranged opposite to said stator.

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